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WHAT IS CLAIMED IS:

- 1. A dextrose hydrate in powder form, having:
 - a dextrose content at least equal to 98%,
- an α crystalline form content at least equal to 95%,
 - a water content greater than 1%,
 - $\,$ a compressibility determined according to a test A at least equal to 70 $\ensuremath{\text{N}}\xspace.$
 - A dextrose hydrate according to claim 1, having a water content in the range 2% to 10%.
 - 3. A dextrose hydrate according to claim 2, having a water content in the range 5% to 9.5%
 - 4. A dextrose hydrate according to claim 1, having a compressibility of at least 90 N.
 - 5. A dextrose hydrate according to claim 4, having a compressibility in the range 90 N to 200 N.
 - 6. A dextrose hydrate in powder form according to claim 1, having a compressibility determined according to a test A in the range 150 N to 200 N and according to a test B at least equal to 170 N.
 - 7. A dextrose hydrate according to claim 6, having a compressibility determined according to a test B in the range 175 N to 300 N.
 - 8. A dextrose hydrate in powder form according to claim 1, having:
 - an apparent density, determined according to ${\tt HOSOKAWA}$, of less than 0.7 g/ml,
 - a mean diameter in the range 50 μm to 1000 $\mu m,$

- a flow grade at least equal to 60.
- 9. A dextrose hydrate according to claim 8, having an apparent density in the range 0.45 g/ml to 0.65 g/ml.
- 10. A dextrose hydrate according to claim 9, having an apparent density in the range 0.5 g/ml to 0.6 g/ml.
- 11. A dextrose hydrate according to claim 8, having a mean diameter in the range 100 μm to 500 $\mu m.$
- 12. A dextrose hydrate according to claim 8, having a flow grade in the range 60 to 90.
- 13. A process for the preparation of a dextrose hydrate in powder form according to claim 1, wherein it comprises a succession of steps consisting in a step involving the rehumidification/granulation, using of a crystalline dextrose suitable binder, substantially $\boldsymbol{\alpha}$ form obtained directly by crystallisation or by partial or complete drying of a crystalline involving dextrose monohydrate, then a step ageing/drying of the rehumidified granulated dextrose thus obtained.
- 14. A process for the preparation of a dextrose hydrate in powder form according to claim 1, wherein it comprises a step involving the granulation of an $\boldsymbol{\alpha}$ crystalline dextrose having a water content greater than 18.
- 15. A process for the preparation of a dextrose hydrate in powder form according to claim 14, wherein the $\boldsymbol{\alpha}$ crystalline dextrose has a water content in the range of 2% to 10%.

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- 16. A process for the preparation of a dextrose hydrate in powder form according to claim 6, wherein it comprises a step involving the granulation of an α crystalline dextrose having a water content at most equal to 1%.
- 17. A process for preparation according to claim 13, wherein the granulation step is carried out in a continuous mixer-granulator.
 - 18. A dextrose in powder form, having:
 - a dextrose content at least equal to 98%,
- an α crystalline form content at least equal to 95%,
- $\,$ a compressibility, determined according to a test A, in the range 180 N to 200 N, and according to a test B greater than 220 N.
- 19. A dextrose in powder form according to claim 18, having a compressibility determined according to a test B, greater than 230 N.
- 20. The use of a dextrose hydrate in powder form according claim 1, as a sweetener, osmotic agent, nutrient or excipient in compositions intended in particular for the food, pharmaceutical, chemical or agrochemical sectors.
- 21. The use of a dextrose hydrate in powder form obtained according claim 13, as a sweetener, osmotic agent, nutrient or excipient in compositions intended in particular for the food, pharmaceutical, chemical or agrochemical sectors.

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